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# FACTS ABOUT ROOF MAINTENANCE



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JULY 1937

# FACTS ABOUT ROOF MAINTENANCE

A BOOK OF SALES INFORMATION

FOR DISTRIBUTORS AND THEIR

SALES REPRESENTATIVES



## THE FLINTKOTE COMPANY

NEW YORK • CHICAGO • BOSTON • ATLANTA  
NEW ORLEANS • WACO • DETROIT • ST. LOUIS

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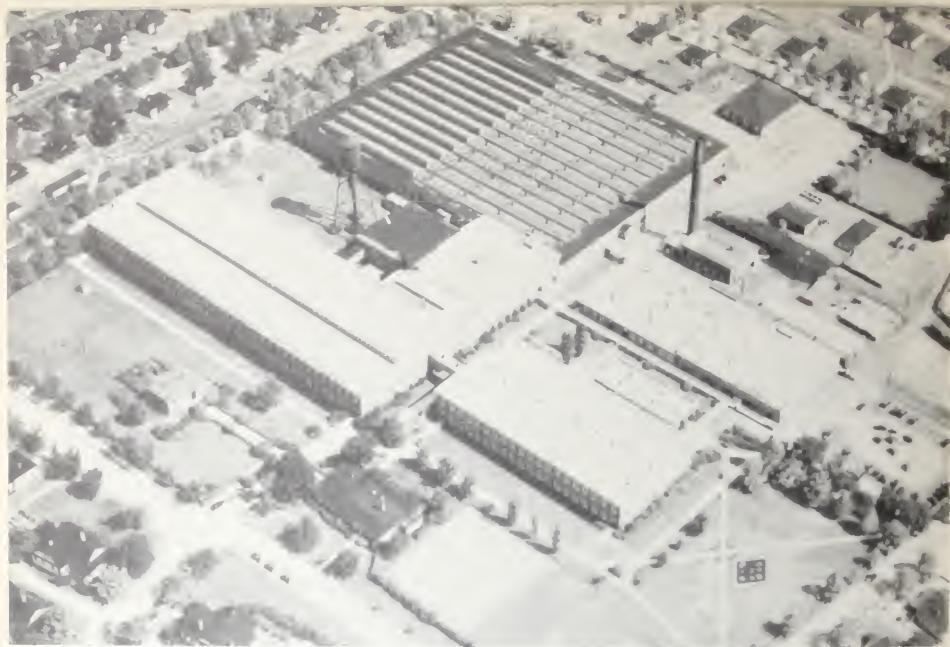
## **SELL WITH FACTS**

**I**N TODAY'S market the experienced buyer is a close buyer who must be convinced he is getting full *value* for his money.

What is value? The answer is obvious... value is proven quality at a legitimate price. Price is important...but price is important primarily in relation to the value delivered.

The Flintkote Company fully appreciates the importance of a proper realization of Today's buying mood. It is convinced that a thorough knowledge of the proven value of Flintkote products affords its distributors, at the point of sales contact, a highly effective selling advantage.

"Facts About Roof Maintenance" has been prepared for you. It is your book. It is offered with the sincere belief that it will help you serve the interests of your customers better and merchandise Flintkote Static Coatings more successfully with profit to yourself. It enables you to: "Sell with Facts!"



18,000 gallons of Flintkote Static Roof Coating are used to preserve the roofs of these Southern mill buildings and houses of mill employees.

## A 50,000,000 GALLON MARKET FOR ROOF COATING

### An Established Industrial and City Market

Look at the photograph above. 18,000 gallons of Flintkote Static Roof Coating used on this single job.

In every city and industrial center there is an established market for this ideal roof coating.

Renovation and modernization plans that were pigeon-holed for years are being dusted off. Industry and agriculture are now engaged in the most widespread rehabilitation and repair program in their history.

Start today aggressively to go after your share of this lucrative business.

### A Known Small Town Market

There is a market for Flintkote Static Roof Coatings *everywhere...* in large industrial centers and in small towns.

Mr. J. Carl Sherer of Howard Lake, Minnesota, *knows* the small-town market is there if one only goes after it intelligently and aggressively.

In Litchfield, Minnesota, a town of 3000 population, 31 roofs protected by Flintkote Static Roof Coating, testify to Mr. Sherer's business vision and sales ability.

Flintkote Static Roof Coatings cut maintenance costs and make good roofs *everywhere* last longer!

Add years of  
Static Roof Coating



In this Minnesota town of 3000 population, all the roofs marked with X's are protected by Flintkote Static Roof Coating. Read the story below.



Add years of life to the entire roof with the process which insures enduring protection. Flintkote Static Roof Coating, applied cold, not only seals out the weather but eliminates future trouble due to failure of the original surface.

# ROOF MAINTENANCE PROBLEMS

(Smooth Surfaced Asphalt Built-Up Roofing, and  
Smooth or Slate Surfaced Roll Roofing)

THE facts given here have been prepared on a "question and answer" basis to present concise and clear information on the high spots of roof maintenance problems and products. This information is backed by years of experience and is offered as the basis for sound sales promotion, greater satisfaction of distributors and customers, and greater profits.

It is hoped that a knowledge of these "Facts About Roof Maintenance" will encourage the reader to go further and acquire more detailed reasons behind these facts. The Flintkote Company has published a booklet, "An Introduction to Industrial Asphalt Products," which forms a comprehensive review of the problems, products, and facts herein presented. A free copy will be sent upon request.

1. QUESTION:

What are the component parts of an asphalt composition roof?

ANSWER:

(a) *Felt.* The base of every type of asphalt roofing is a sheet of felt which is saturated with

(b) *Asphalt,* the waterproofing medium.

The combination of these materials provides the strength, pliability, and

waterproof qualities essential to long-life roof protection. A roof is exposed to the severest imaginable treatment . . . the elements . . . therefore a surface protection coating against the elements is essential, that is:

(c) *A Seal Coating. A weatherproof material.*

2. QUESTION:

What type of material is best suited for use as a Seal Coating?

ANSWER:

*Asphalt,* because of its economy and waterproof properties which have been accepted since ancient times, is the best known material for this type of protection.

3. QUESTION:

What are the properties of asphalt?

ANSWER:

Elasticity, toughness, resiliency, endurance, and waterproofness.

4. QUESTION:

Has any progress been made in improving asphalt in its natural form?

ANSWER:

Yes: first, by the development of cutback asphalts, commonly known as "liquid" and "Fibre" coatings. This is asphalt thinned into a liquid state by dissolving in petroleum solvents. Cutback asphalts are applied in cold form. Furthermore, additional penetrative properties are imparted to cutback asphalts, which makes as-

phalt in certain nance. S which p flowing ture does as a cor forms of

5. QUESTION:

What are asphalt e

ANSWER:  
The pro products jectives:

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(b) It er by th life a roof Roof form ors a

6. QUESTION:

At what t be applied

ANSWER:  
Obviously vious seal that is, be ments can the roofig longest-liv long run,

\*NOTE: The term emulsion, which he also "unstable" typ

phalt in this form of particular value in certain phases of roof maintenance. Second, by the development of Industrial Asphalt Emulsions, which provide a "static" or non-flowing film, which, due to its nature does not crack or alligator and as a consequence outlasts other forms of bituminous material.\*

5. QUESTION:

What are the properties of industrial asphalt emulsion?

ANSWER:

The process of manufacture of these products achieves two essential objectives:

- (a) It makes possible the use of those bituminous materials which are highly flexible, soft, and long lived, but which cannot be used in ordinary coatings because of their tendency to flow when subjected to unusually high temperatures.
- (b) It creates a "static" film which, by this virtue, assures maximum life and service as a protective roof coating. Flintkote Static Roof Coating is asphalt in this form, as marketed by its inventors and leading manufacturers.

6. QUESTION:

At what time should a seal coating be applied?

ANSWER:

Obviously, at the time that the previous seal coating ceases to function; that is, before damage from the elements can penetrate to the body of the roofing. It is evident that the longest-lived seal coating is, in the long run, the most economical.

7. QUESTION:

What happens to a roof if re-sealing is deferred too long?

ANSWER:

The deterioration of the roofing surface, if neglected too long, will ultimately cause additional roofing trouble and added maintenance expense.

8. QUESTION:

What should be recommended in such event?

ANSWER:

First, if the roof is dried out through loss of saturant, *re-saturation* is essential. This is best achieved with Flintkote Roof Saturant, a cutback asphalt having high penetrative qualities. Second, if deterioration has reached a point where ruptures or breaks have occurred or are likely to occur, then *reinforcing* is also necessary. This is best achieved with Flintkote Roof Tape and/or Flintkote Asphalt Saturated Membrane, used with a suitable coating.

9. QUESTION:

Summarize the different aspects of roof maintenance which should be considered before an intelligent sales approach and recommendation should be undertaken.

ANSWER:

Good practice in Roof Maintenance may involve one or all of the following:

- (a) Repairing structural defects.
- (b) Re-saturation.
- (c) Reinforcing
- (d) Re-sealing with Flintkote Static Roof Coating. See the next page.

\*NOTE: The term "industrial asphalt emulsion" is used advisedly to designate the "stable" type of asphalt emulsion, which has the characteristics described above, these being essential to the industrial field. There are also "unstable" types of asphalt emulsion, best suited to the paving field, with which we are not here concerned.

## ECONOMY IN ROOF MAINTENANCE

OF ASPI

The user of Flintkote Static Roof Coatings gets *double* protection and *double* savings . . . he not only preserves the materials in the roof itself, thus protecting the original capital investment, but also reduces otherwise expensive maintenance costs to a minimum.

This carefree low-cost roof protection is possible only with Flintkote Static Roof Coating. The exclusive Flintkote process produces a "static" asphalt that gives proven longer life on *countless roofs* in all parts of the world.

### THE PERFECT ROOF COATING

Flintkote Static Roof Coating is an ideal roof protection for smooth surfaced asphalt built-up roofing, smooth or slate surfaced roll roofing, and metal roofs.

The exceptional durability of Flintkote Static Roof Coating is due to a special processing that reinforces the structure of the coating. Flintkote Static Roof Coating

will outlast any bituminous material exposed to the weather.

### CHARACTERISTICS OF THE IDEAL ROOF COATING

Today's buyer wants to protect his pocketbook when he buys roof protection. He wants proven value at a legitimate price.

What are the factors that constitute quality in roof coating?

Check the chart reproduced on the following page. It lists the four fundamentals of roof coating quality...it eliminates guesswork when buying a roof coating.

### COMPARE!

Check any other roof coating for these four features, remembering that two, or even three, are not enough . . . that your customer must have all *four* to protect his pocketbook . . . to get the efficient low-cost roof protection he requires and demands. Flintkote welcomes and invites comparison!

1. No Flowing Un

2. No Cracking Un

3. No Alligatoring

4. Fire-Resistant

These are

Your thorough  
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of each of the  
listed in the  
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these four  
coating qua  
this book.

Your cus  
acting in the

## THE FUNDAMENTALS OF ASPHALT ROOF COATING QUALITY

	FLINTKOTE STATIC ROOF COATING	OTHER BRANDS
1. No Flowing Under Heat	✓	
2. No Cracking Under Cold	✓	
3. No Alligatoring Under Any Conditions	✓	
4. Fire-Resistant	✓	

*Result: PROVEN LONGER LIFE*

These are the Factors that Constitute Quality in Roof Coatings.

Your thorough knowledge of the importance and interdependence of *each* of the four characteristics listed in the above chart provides you with sincere, honest facts so that you can best serve the interests of your customers. Each of these four fundamentals of roof coating quality is discussed fully in this book.

Your customers should be exacting in their demands. Ask them

to challenge you to demonstrate the known merits of Flintkote Static Roof Coating. Review with them the data in this book when they ask for facts!

Make certain your customers "face the facts" and measure results by comparing *Costs* in relation to *Results*. The keynote in efficient economical roof maintenance is *not* price per gallon. It definitely is "*Maintenance Cost per 100 Square Feet per Year*."

# CHARACTERISTICS OF FLINTKOTE STATIC ROOF COATING



## 1. NO FLOWING UNDER HEAT

Flintkote Static Roof Coating is *static*. It will not flow, on steep or vertical surfaces, under the scorching rays of the hottest Summer sun because the dried film of Flintkote Static Roof Coating is reinforced by the mineral colloid (used in the emulsification process) which prevents internal molecular flow.



## 2. NO CRACKING UNDER COLD

Flintkote Static Roof Coating does not crack in sub-zero Winter weather. The exclusive Flintkote process makes possible the use of bituminous materials which are highly flexible, soft, elastic, and long-lived, but which cannot be used in ordinary coatings because of their tendency to flow when subjected to unusually high temperatures. Thus, in ordinary coatings, harder forms of bitumen are used which become brittle and crack in cold temperatures.

3. NO ALLIGATION  
CONDITIONS

Flintkote Static  
alligator under a  
nature of the film  
rivation of asphal-  
tion when exposed



Flintkote  
Static Roof  
Coating

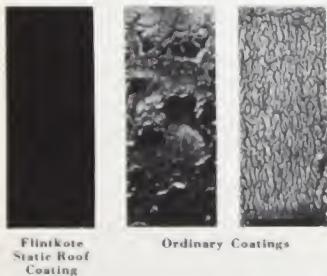
### 3. NO ALLIGATORING UNDER ANY CONDITIONS

Flintkote *Static* Roof Coating does not craze or alligator under any conditions because the *static* nature of the film eliminates the progressive deterioration of asphalt caused by progressive oxidation when exposed to the Actinic rays of the sun.



### 4. FIRE-RESISTANT

Flintkote *Static* Roof Coating warrants the Board of Fire Underwriters Class C Label for built-up roof coating when used on built-up roofs constructed in accordance with the specifications of the Board of Fire Underwriters. Flintkote *Static* Roof Coating "provides barriers to the passage of flame and effectively resists burning brands of the severity and size to justify Class C classification" according to the Underwriters Laboratories' official report. Flintkote *Static* Roof Coating can't burn. It serves as a barrier to the menace of fire to property and human life.



### THE RESULT - PROVEN LONGER LIFE

Weather tests prove the marked superiority of Flintkote *Static* Roof Coating. The photographs at the left show three coated test panels exposed under identical conditions. Flintkote *Static* Roof Coating shows no effect from exposure while the other panels of ordinary coatings show common forms of deterioration. Flintkote *Static* Roof Coating will outlast any bituminous material exposed to the weather.

## APPLICATION

SPECIFICA

Listed below are specific suggestions, based on years of practical experience, for the proper care of roofs. Such care is an Investment, not an Expense. Inspect your roofs at least twice a year. You will save money if you make periodic roof inspection every six months a definitely scheduled part of your maintenance program.

In order to give a complete specification for reconditioning the roof, the following points should be carefully checked:

### INSPECTION OF ROOFS

1. Note the condition of flashings. Look particularly for breaks or areas where flashings may be loose from wall. Defective flashings may be responsible for a large percentage of roof leaks.
2. Examine the body of roof for breaks, cracks through felts, blisters, defective seams, exposed nails and loose or

rotted roof boards. Mark all areas in need of repair. Bear in mind that Coating alone cannot be expected permanently to bridge weak spots. A crack or break indicates the need of additional strength and reinforcing with Roofing Membrane is necessary for these conditions.

3. Carefully examine felts for saturation, pliability and strength. If felt appears to contain but little Asphalt Saturant, re-saturation is indicated. This restores strength and pliability. Dried out felts are weak felts and weakened felts crack and break under roof stresses and movements.
4. Note condition of parapet walls. These are frequently the source of leaks.
5. Note condition of copings. Leaks can also arise from this source.

## ROOF CARE . . . . .

# SPECIFICATIONS

## REPAIRS

### 1. Flashings.

Flashings showing breaks or cracks should be reinforced with Roofing Membrane embedded in Flintkote Plastic Cement. Roofing Membrane should be carried well out onto the body of the roof. Flashings that are loose from the walls should be re-cemented with Flintkote Plastic Cement and held in place by new lath or anchored to the wall by a strip of Roofing Membrane embedded as above. The Roofing Membrane should extend at least three inches above the old flashing and down onto the flashing proper for the same distance. The flashing should then receive a heavy coat of Flintkote Static Roof Coating as a final Seal coat.

### 2. Parapet Walls.

The surface should be cleaned of all loose mortar, etc., pointed up, dampened, and given two heavy

coats of Flintkote Static Roof Coating.

### 3. Copings, Cap Stones, Etc.

Small cracks may be repaired with Flintkote Static Roof Coating and Flintkote Asphalt Saturated Membrane. Where necessary large holes and voids may be first filled with Flintkote Plastic Cement prior to the application of the Membrane and Static Coating. The entire surface may then be given one or two heavy coats of Flintkote Static Roof Coating.

## CLEANING

Clean the roof surface thoroughly of all dust, dirt, loose or sealy material, sweep and wash with water.

## REINFORCING

All defective seams, breaks, cracks or weak spots should be reinforced with Roofing Membrane laid in a heavy film of Flintkote Static Roof Coating and firmly embedded by stiff-brooming.

**A N INVESTMENT, NOT AN EXPENSE**

## APPLICATION

SPECIFI

### RE-SATURATING

When re-saturation is required because the old felt is dried out and appears to contain but little saturant, apply a coat of Flintkote Roof Saturant in a quantity sufficient to soak up felts but leaving no appreciable film thickness on the surface. In general this will require from  $\frac{3}{4}$  to 1 gallon of Flintkote Roof Saturant per 100 square feet of surface.

### RE-SEALING

Flintkote Static Roof Coating may be diluted with not more than 10% of clean cold water to aid in brushing. The coating should be "flowed" on rather than brushed out. Flintkote Static Roof Coating should be applied over the whole roof area in one or two heavy coats, preferably the latter. The length of service is, within limits, related to the film thickness applied. While coatings of 2 to 3 gallons per 100 square feet are usual and assure

excellent service, coatings of up to 5 gallons per 100 square feet will guarantee proportionately greater service.

### METAL PROTECTION

The metal should first be thoroughly cleaned of all dirt, grease, scale, or rust. Previous coatings which have become loose and flaky should be removed. The surface should then be given one or two heavy coats of Static Protective Coating at the rate of not less than 2 gallons per 100 square feet.

On the inside of water tanks and other places where the coating is to be continually in contact with water, Flintkote C-13-E Emulsified Asphalt should be applied in one or two heavy coats.

As an alternate to the above, a mixture by volume of 6 parts Flintkote Static Protective Coating and 1 part dry Portland Cement may be applied at the rate of 2 gallons per

100 square feet of  
coat of Flintkote  
Coating. This mi  
prepared as follow

1 volume of dr  
land Cement

2 volumes of  
Stir thoroughl  
creamy consis  
through 20-40  
this cement sh  
volumes of Flin  
lective Coating  
a uniform co  
with water suffi  
application.

In instances whe  
rosion may not ha  
a prime coat of  
may be used follo  
application, when  
Static Protective

TAR AND GR  
Asphalt coating  
suited to the tre  
gravel roofing,

## ROOF CARE

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## SPECIFICATIONS

100 square feet over a dried prime coat of Flintkote Static Protective Coating. This mixture should be prepared as follows:

1 volume of dry screened Portland Cement

2 volumes of clean water.  
Stir thoroughly to a smooth creamy consistency and pass through 20-40 mesh screen. To this cement slurry add 5 to 6 volumes of Flintkote Static Protective Coating and stir until of a uniform consistency. Thin with water sufficiently for brush application.

In instances where evidence of corrosion may not have been removed, a prime coat of red or blue lead may be used followed by the proper application, when dry, of Flintkote Static Protective Coating.

### TAR AND GRAVEL ROOFS

Asphalt coating products are not suited to the treatment of tar and gravel roofing.

In addition to Flintkote Static Roof Coating, The Flintkote Company has developed, over a period of years, a line of Asphalt Specialty Products designed for Industrial Maintenance.

Application specifications are available for:

1. Waterproofing and Damp-proofing
2. Protection of Structural Steel, Bridges, and Steel Water Tanks
3. Colored Protective Coatings
4. Tree Surgery
5. Heavy Duty Mastic Flooring  
(Hand Application and Patching, and Machine Application)

Write to The Industrial Asphalts Division, The Flintkote Co., 50 West 50th Street, New York, N.Y., for a free copy of "Industrial Asphalt Products for Maintenance - Specifications".



## AN INVESTMENT, NOT AN EXPENSE

IND



Flintkote Static Roof Coating is available in handy 1-gallon cans, 5-gallon pails, and 30- and 55-gallon drums.



SALES OFFICES

OF

**THE FLINTKOTE COMPANY**

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*Products Distributed by*

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Protective Coatings	Insulation Protection
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Mastic Flooring Emulsions	Floor Tile Cements
	Emulsified Asphalt Specialties

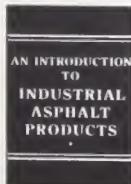
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Asphalt Primer	Plastic Cement
Asphalt Roof Coating	Cutback Asphalt Specialties

### ASPHALT SATURATED FABRIC

Light Weight Saturated Fabric	Heavy-Duty Saturated Fabric
12 Oz. A.S.T.M. Fabric	Roof Tape

### A Valuable Reference Book on Maintenance Problems



Get a *free* copy of the Flintkote book: "An Introduction to Industrial Asphalt Products." Numerous photographs taken in Flintkote plants, research laboratories, and on exposed roofs and surfaces tell a complete story. Scientific tests are explained. This sincere presentation of *facts* gives you a yard-stick to measure protection values and enables you to buy maintenance products with confidence. "An Introduction to Industrial Asphalt Products" is the only book of its type available. Maintenance experts regard it as permanently valuable for reference purposes.

